

METHOD OF REDUCING ELECTROMAGNETIC EMISSIONS (EMI) FROM LED BAR SYSTEMS

Abstract of the Disclosure

Light emitting diode (LED) bar systems have large surface areas and extensive cabling that carry high frequency clocks and data. As the process speeds increase, the higher clock and data rates become an electromagnetic interference (EMI) problem. As the U.S. federal government restricts EMI emissions, many have turned to shielding techniques. However, a spread spectrum technique now may also reduce peak EMI amplitudes by distributing the EMI energy over a range of frequencies. The pixel data may be clocked into a LED bar system with a varying frequency to spread the energy over the range of the modulation. The same total energy is still emitted from the system, but the peak energy at any particular frequency is reduced.

Figures